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To: Elizabeth.A.Santana@usace.army.mil
Cc: [Jen, Mark](#)
Bcc: [Chu, Rebecca](#)
Subject: EPA Comments - Draft Environmental Assessment for the Sand Island Pile Dike Repairs in Clatsop County, OR and Pacific County, WA (Lower Columbia River)
Date: Thursday, June 02, 2022 3:27:00 PM
Attachments: [image001.png](#)
[image002.png](#)

June 2, 2022

Ms. Elizabeth Santana
Environmental Resources Branch
U.S. Army Corps of Engineers, Portland District
Attn: CENWP-PME-E
P.O. Box 2946
Portland, Oregon 97208-2946

Dear Ms. Santana;

The U.S. Environmental Protection Agency has reviewed the U.S. Army Corps of Engineers, Portland District's Public Notice for the Sand Island Pile Dike System Repairs Draft Environmental Assessment (EPA Project No. 22-0028-USACE) located along the mouth of the lower Columbia River in Clatsop County, Oregon and Pacific County, Washington. EPA is providing comments and recommendations regarding air quality, greenhouse gas emissions, climate change resilience and adaptation, environmental justice, and Tribal consultation and coordination to support development of the NEPA analysis for this project.

Air Quality

EPA established the national ambient air quality standards for six "criteria" pollutants as emitted by any stationary, mobile, marine, and/or land-based sources. These standards establish threshold levels for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone, particulate matter (PM_{2.5} and PM₁₀), and sulfur dioxide (SO₂). The DEA provides estimates of emissions from construction activities for certain criteria pollutants, but does not specify their units of measurements (Table 6; page 26 - 27).

EPA recommends updating Table 6 and the discussion in the NEPA analysis to include:

- Units of measurements for CO (ppm); NO_x (ppb); and PM_{2.5} (ug/m³);
- Emissions estimates from construction activities for lead (ug/m³), PM₁₀ (ug/m³), and SO₂ (ppb) or the reasons for not including emission estimates for these additional NAAQS criteria pollutants; and
- Comparison of the project construction emissions with the NAAQS thresholds for each criteria pollutant.

Greenhouse Gas Emissions

The DEA provides carbon dioxide (CO₂) emissions estimates from construction activities without units of measurements (Table 6). EPA recommends that the project-level GHG emissions (e.g., CO₂, CH₄, N₂O and fluorinated gases) from construction activities be

reported in the NEPA analysis for their global warming potential weighted in CO₂ equivalent units (CO₂-e) and included to Table 6. EPA's *Greenhouse Gas Equivalencies calculator*¹ may be a useful tool to convert emissions or energy data to the equivalent CO₂-e emissions for this project.

In addition, EPA recommends that the NEPA analysis include:

- A detailed discussion of the project-level GHG emissions in the context of local and national GHG emission reduction goals;
- Identification and evaluation of emissions reduction measures and policies that would advance the national 2030 and 2050 GHG reduction goals by adopting the recently published *Long Term Strategy of the United States*;²
- Evaluation and disclosure of the potential climate damages through SC-GHG, which reflects the best available science and methodologies to monetize the value of the net harm to society associated with the changes in GHG emissions resulting from the proposed action.³ The estimates of GHG emissions for construction activities should be included in the NEPA analysis to inform the public and decision makers regarding the social benefits of reducing GHG emissions and the social costs of increasing such emissions resulting directly, indirectly, and cumulatively from this proposed project. To assess the climate impacts and weigh their significance in terms of benefits and costs, EPA recommends monetizing potential impacts of GHG emissions using estimates of the social cost of GHG (SC-GHG), as appropriate.

Climate Change Resilience and Adaptation

In order to bolster climate change resilience and adaptation of the proposed project, EPA recommends that the NEPA analysis identify and evaluate the following:

- Climate resiliency, such as how extreme weather, storm events, currents, and ocean and flood tides may affect the pile dike system;
- Consequences of failure and vulnerabilities related to performance of the pile dike system and other appurtenant structures to climate change and their effects; and
- Additional planning, mitigation measures, corrective actions, response actions, etc. to address potential failures of the pile dike system and other appurtenant structures, and project resilience to the effects of climate change.

Environmental Justice

EPA's EJScreen is an environmental justice screening and mapping tool (Version 2.0)⁴ that provides a nationally consistent dataset and approach for combining environmental and demographic indicators. EPA considers a project to be in an area with potential environmental justice concerns when the EJScreen report for the selected block group identifies at least one of the twelve EJ Indexes to be at or above the 80th percentile when compared to the state (Oregon and Washington) and national levels.

EPA notes that there may be uncertainties associated with this screening-level information and limitations on appropriate interpretations and applications of these indexes. Although EJScreen may be useful for the initial EJ screening analysis, it does not provide information on every environmental effect and demographic factor that may be relevant to a particular location and/or proposed project.

EPA recommends that the EJ analysis evaluate all potential affected areas within a single block group and/or across several block groups and communities within the project area in Oregon and Washington, and include other information sources in the EJ analysis/review to supplement the EJSscreen report, particularly related to indigenous populations in the Columbia River.

EJSscreen (Version 2.0) was recently updated to include a twelfth EJ Index for wastewater discharges, which was not reflected in the NEPA analysis comparison for Pacific County, WA (Table 18; page 57). EPA recommends that the USACE conduct a new comparison of EJ Indexes for both Clatsop County, Oregon and Pacific County, Washington using EJSscreen (Version 2.0), which includes the twelve EJ Indexes.

To support the success of the project EJ analysis, EPA recommends that the NEPA document:

- Provides meaningful public outreach and engagement with EJ communities regarding potential disproportionate and adverse environmental impacts associated with this proposed project and identify measures to mitigate for those impacts. In particular, the USACE should continue efforts to coordinate and consult with any potentially affected Tribes on a government-to-government basis regarding Tribal treaty rights establishing traditional “usual and accustomed areas.”; and
- Identifies mitigation measures to minimize the project’s effects on potential tribal treaty rights and access to traditional “usual and accustomed areas” for fishing, as well as cultural and subsistence resources and uses.
- Consider integrating indigenous knowledge/TEK with western science to provide additional information about the local indigenous people as appropriate.

Tribal Consultation and Coordination

EPA notes that in a November 11, 2021, Tribal Government-to-Government Letter, the USACE extended an offer to engage in consultation and coordination with the Confederated Tribes of the Grand Ronde Community of Oregon, the Confederated Tribes of the Siletz Indians, Cowlitz Indian Tribe, Confederated Tribes and Bands of the Yakama Nation, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation of Oregon, Shoalwater Bay Tribe, and the Nez Perce Tribe. No tribes responded to the letters or requested additional information or additional consultation. EPA encourages the USACE to continue consulting and coordinating with Tribes, and to incorporate feedback from Tribes when making decisions regarding the project, particular after the release of the DEA.

Thank you for the opportunity to review the DEA for this project. These comments and recommendations provide additional considerations to improve the environmental document. If you have questions regarding this review, please contact me at jen.mark@epa.gov or by telephone, at (907) 271-3411.

Sincerely,

Mark Jen  Digitally signed by Mark Jen
Date: 2022.06.02 12:51:30
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Mark Jen, NEPA Reviewer

References:

- ¹ EPA Greenhouse Gas Equivalencies Calculator. Accessible at: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>.
- ² U.S. Department of State and Executive Office of the President (November 2021). *The Long-Term Strategy of the United States: Pathways to Net-Zero Greenhouse Gas Emissions by 2050*.
Accessible at: <https://www.whitehouse.gov/wp-content/uploads/2021/10/US-Long-Term-Strategy.pdf>.
- ³ Interagency Working Group on the Social Cost of Greenhouse Gases, United States Government (February 2021). *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide - Interim Estimates under Executive Order 13990*.
Accessible at: https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf.
- ⁴ EPA's EJSCREEN (Version 2020). Accessible at: <https://www.epa.gov/ejscreen>.



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